KUZELEV, V.Ya.; KUZNETSOV, A.A.

A device for bending the ring of maring tolls. Politekh.obuch. no.3:84 Mr '59. (MIRA 12:4)

1. Srednyaya shkola No.475, Moskva.
(Marking devices)

KUZELKA, Vaclav; KADLEC, Jaroslaw

Theoretical analysis of static stability of spacer grids of the pin-type fuel element of the A-1 nuclear reactor. Jaderna energie 9 no.11:356 '63.

1. Statni vyzkumny ustav tepelne techniky, Praha.

[redacted]

SKVORTSOV, Aleksey Anatol'yevich, prof., doktor tekhn. nauk;
AKINENKO, Anatoliy Dmitriyevich, dots., kand. tekhn. nauk,
KUZELOV, Mikhail Yakovlevich, dots.

[Heating units] Nagrevatel'nye ustroistva. Moskva, Vysshaia shkola, 1965. 443 p. (MIRA 18.12)

2426. HEGYI E., KUZELOVÁ K. and LENDVAI O. Dermatol. Kat. LFUK, a Por-Adne pre Kozne Chor. z. Povolania, a Zavodnej Ambul. Kozovjet Zavodov, Bratislava. *Profesionálny výskyt epidermofýcie pri práci s cirokom. Occupational incidence of epidermophytosis in workers handling broomcorn BRATISLAVSKÉ LEKÁRS. LISTY 1956, 36/11 (677-684) Tables 1 Illus. 1

In an outbreak of corporeal epidermophytosis among workmen producing brushes from broomcorn straw, a positive culture of Epidermophyton Kaufmann-Wolf was obtained in 3 cases. This is the first transmission reported of epidermophytosis by broomcorn. Preventive measures were successful.

(XVII, 13)

KUZELOVA, K.

2

Effect of some disinfectants on dermatophytes. L. Chmel and K. Kuželová (Kuželová) Brno, Pedifava, Czech.). *Bratislav. Lékařské listy* 36, 11 (1956).—
Effects are described of 7 com. disinfectants in descending order: phenylmercuric borate, cresol (1%), cresol (2%), dimethyldodecylbenzylammonium chloride, cresol (5%) and K-soap (50%), phenol, Na *p*-toluenesulfonchloramide (I), and a prepn. contg. I with azo-orange. Antifungal activities of the individual compds. are discussed.
L. J. Urbánek

CZECHOSLOVAKIA

ROCKL, V., MD, KOZELOVA, M., MD, and VLASAK, R., Engr [affiliation not given].

"Esters of Acetic Acid (Acetates)"

Prague, Pracovni Lekarstvi, Vol XV, No 6, August 1963, Prehledy [a supplement], pp 11-13].

Abstract: General information on the properties, permissible concentration, uses, hygiene, estimation, toxicology, biological tests, and inspection. Fourteen references, including 6 Czech and 1 Slovak.

1/1
2050

KUTILOVA, Marie; VANOUSA, Jan

Contribution to the differential diagnosis of vascular diseases during work with pneumatic tools. Prac. lek. 16 no.7:329-331 S '64.

1. Oddeleni chorob z povolani (vedoucim ustavu mar. min. zdravi v Pardubicich (vedouci MUDr. M. Kutilova, Pathologicka klinika fakulty vseobecneho lekarstvi Karlovy university v Praze (prednosta prof. dr. V. Dvab, DrSc.).

CZECHOSLOVAKIA UDC 613.632:615.9(:547.322.31:547.291)

KUZELOVA, Marie; VLASAK, Rudolf; Okresni Institute of National Health, Department of Occupational Diseases (Oddeleni Chrob z Povolani OUNZ), Pardubice, Head (Vedouci) Dr M. KUZELOVA; Okresni Station of Hygiene and Epidemiology (Hygienicko-Epidemiologicka Stanice), Pardubice, Director (Reditel) Dr V. KLEINBAUER.

"Effect of Methylene Dichloride on the Health of Workers in the Production of Film Foils, and Study of Formic Acid as the Metabolite of Methylene Dichloride."

Prague, Pracovni Lekarstvi, Vol 18, No 4, May 66, pp 167 - 170

Abstract [Authors' English summary modified]: The effect of methylene dichloride (dichloromethane) was studied in a group of 33 workers who were exposed to it for an average period of 2 years. The concentration prescribed by Czechoslovak law, that is 0.5 mg/l, was exceeded all the time; the US and British maximum of 1.75 mg/l was exceeded sometime up to 10 times. 72% of the workers complained of headaches, 50% of fatigue after work, 49% of irritation of upper respiratory tracts, 50% of neurasthenia, and 30% of digestive disorders. During the investigated period there were 3 cases of acute poisoning; all 3 recovered. 1/1 (1 Table, 8 Western, 7 Czech references. (Ms. rec. 16 Jul 65).

K[illegible]ZHOVA, M[illegible]; [illegible], Herman, MUDr.

Follow-up of the health status of subjects w[illegible] diethyleneglycol after cessation of exposure. Prac. lek. 17 no.2:44-46 Mr'65.

1. Oddeleni chorob z povolani (vedoucí: MUDr. M. Kvapilova), interni oddeleni (vedoucí: MUDr. B. Herman) Okresního ustavu narodního zdravi v Jindřichově [illegible]. Kvapilova's address: Gurinin III, J. Sv. Purkyne 52/4.

MOV I

[illegible], V.A., CHEVCHENKO, T.E., KUZ'MA, A.I., [illegible], G.O.

"Fishing in the Kolkhoz "Tvorchyy Vyrobnyk,"

Rybnoye khozyaystvo

Kolkhozu "Tvorchyy Vyrobnyk;

K.-Kh., Izvestiya V[illegible] Nauk. Tekh.

Lyt-ra, 1959, p 19.

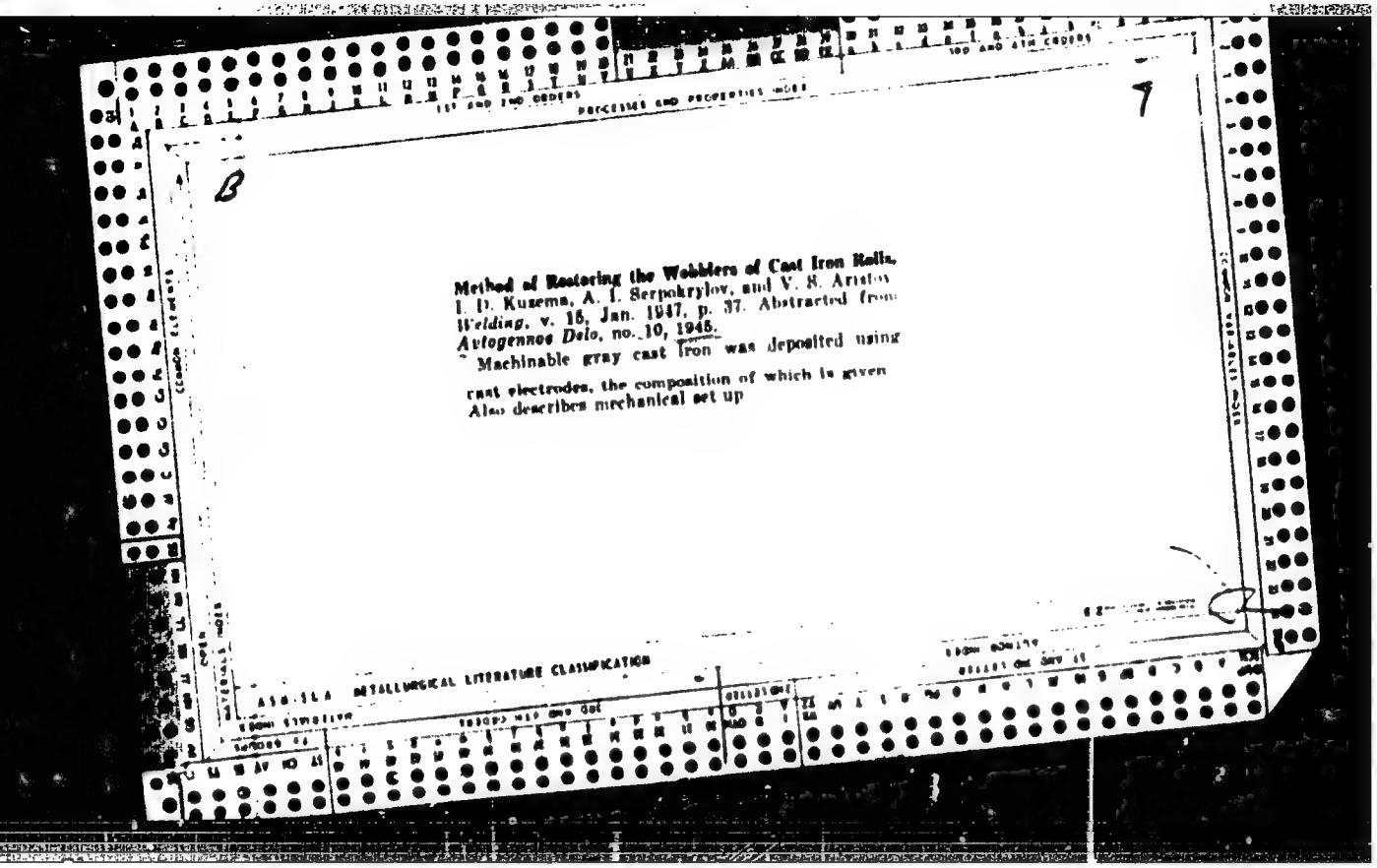
KUZEMA, A.I.

Ukrainian varieties of carp. Trudy sov.Ikht.kom. no.2:65-70 '51.
(MLRA 7:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut prudovogo i ozerno-rechnogo rybnogo khozyaystva.
(Ukraine--Carp) (Carp--Ukraine)

KUZEMA, D.D. (Poltava)

Device for demonstrating the law of Boyle-Mariotte. Fiz. v shkole 20 no.6:74 N-D '60. (MIRA 14:2)
(Gases) (Physics—Study and teaching)



Method of Restoring the Wobblers of Cast Iron Rolls.
I. D. Kuzema, A. I. Serpokrylov, and V. S. Aristov
Welding, v. 16, Jan. 1947, p. 37. Abstracted from
Avtogennoe Delo, no. 10, 1946.

Machinable gray cast iron was deposited using
cast electrodes, the composition of which is given
Also describes mechanical set up

Kuzema, I. D.

"Determination of the Stress During Wire Drawing", Stal', 1946, Nr 2, pp 96-99.

KUZEMA, I. D.

USSR/Steel, Carbon
Metallurgy

May 1947

"Regulation for Rolling Carbon Steel Plates," I. D. Kuzema, Factory imeni Il'yich, 3 pp

"Stal'" Vol VII, No 5

For high-quality carbon steel it is necessary to regulate the amount of carbon in the steel with reference to the thickness of the plates. Degree of pressure under temperature of final rolling has great effect on the plates.

18T32

KUZEMA, I. D.

IA 41T29

USSR/Engineering
Metallurgy
Steel Ingots

Jan 1948

"Rational Shapes for Slabs," I. D. Kuzema, Engr, Works imeni Il'ich, 5 pp

"Stal'" No 1

Offers methods for making slabs in new sizes. Claims that this must be done to decrease loss of metal during the cutting of plates. Claims that, for the most part, this can be accomplished by use of Convexo-concave wide and straight (or lightly convexo-concave) thin facets. Waste can also be cut down by the use of slabs of the proper width.

41T29

KUZEMA, I.; GAVRILENKO, N.

Rolling (Metalwork)

Rolling metal with negative tolerance. Za ekon. mat. no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

KUZEMA, I.D., inzh.

Irregular deformation. Obr.met.davl. no.3:33-48 '54.
(MIRA 12:10)
(Deformations (Mechanics)) (Forgings)

KUZEMA, I.D., inzhener; PETIN, A.G., inzhener

Increasing the fatigue resistance of blooming mill rolls. Stal' 15 no.6:563-564 Je '55. (MLRA 8:8)
(Rolling mills)

KUZEMA, I.D., inzhener.

Potentialities for an increased output of three-high sheet mills.
Stal' 16 no.4:331-333 Ap '56. (MLRA 9:9)
(Rolling mills)

KUZEMA, I. D. Cand Tech Sci -- (diss) "Inequality of the deformation associated with ~~caused by~~ pressing and ~~laminating~~". Mos, 1957. 13 pp23 cm. (Min of Ship Building USSR. Central Order of Lenin Sci Res Inst), (KL, 10-57, 103),

AUTHOR: Kuzema, I.D. (Engineer) 133-6-18/33

TITLE: A rational method of choosing the weight of slabs for the production of plate. (Ratsional'nyy metod fabrikatsii listovykh slitkov).

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.541-543 (USSR).

ABSTRACT: At present on all metallurgical works a constant manufacturing coefficient for slabs for each kind of steel is used. This is calculated on the basis of mean total metal losses for cut off edges and scaling of metal, without taking into consideration required dimensions of rolled plates. The author derived formulae incorporating the dimensions of plates for calculating the manufacturing coefficients and relative losses of metal on cut off side edges and head and tail ends of a plate (with specimens for technological tests cut off from one or both ends of a plate). The comparison of the dependence of the actual losses of metal in cut off side edges on the width of plates with those calculated from the proposed formulae as well as similar comparison of the dependence of metal losses for test strips on the length of the plate are given in Figs.2 and 3 respectively. The dependence of manufacturing coefficients on the required width and length of plates

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A rational method of choosing the weight of slabs for the production of plate. (Cont.) 133-6-18/33

for steel CXJ-1 is given in Fig.4. It is pointed out that the use of the method proposed produced a saving of metal of about 3%. E.N.Grishina participated in the above work.

There are 4 figures.

AVAILABLE: Library of Congress
Card 2/2

PHASE I BOOK EXPLOITATION SOV/3226

Nauchno-tekhnicheskaya konferentsiya po itogam "Sovremennoye dostizheniya prokatnogo proizvodstva."

Trudy...(Transactions of the Intercollegiate Scientific and Technical Conference on Recent Achievements in the Rolling Industry) Leningrad, 1958. 251 p. 1,600 copies printed.

Sponsoring Agencies: Leningradskiy politekhnicheskiy institut im. M.I. Kalinina, Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti Leningradskoye otdeleniye, and Nauchno-tekhnicheskoye obshchestvo metallurgov, Leningradskoye otdeleniye.

Resp. Ed.: V.S. Smirnov, Doctor of Technical Sciences, Professor; Ed.: N.N. Pavlov.

PURPOSE: These proceedings of the conference are intended for specialists in the rolling industry.

COVERAGE: The articles of this collection cover various theoretical and practical problems of rolling, such as: pressure, spread, efficiency of rolls, determination of deformation, forces required, pass design, optimum conditions for rolling, experiences of various plants, modernization of equipment, aluminum-clad steel, and rolling of nonferrous metals. No personalities are mentioned. References appear after each article.

SOV/137-59-1-1559

Translation from: Referativnyy zhurnal Metallurgiya, 1959, Nr 1, p 208 (USSR)

AUTHOR: Kuzema, I. D.

TITLE: The Relationship Between the Geometrical and Weight Tolerances for Heavy Sheet Steel (Svyaz mezhdu geometricheskimi vesovymi dopuskami v tolstolistovoy stali)

PERIODICAL: Tr. Mezhvuz. nauchno-tekhn. konferentsii na temu: "Sovrem dostizh. prokatn. proiz-va". Leningrad, 1958, pp 208-213

ABSTRACT: A presentation of the derivation of a mathematical relationship between the geometrical allowance in thickness a on the edges of the steel sheets and the weight tolerance Δ; the relationship is expressed by the formula $a = \Delta_n - (2/3)(\Delta_{max} - \Delta_{min})$, where Δ_n is the nominal thickness of the sheet and $(\Delta_{max} - \Delta_{min})$ is the sum of the wear and the deflection of the rolls. For sheets that are rolled with negative weight allowances $\Delta_{max} - \Delta_{min} = 0.2 + 0.4\ (w-1)$ and for sheets being rolled in accordance with their theoretical weight $\Delta_{max} - \Delta_{min} = 0.2 + 0.6\ (w-1)$ where w is the width of the sheets in meters. An example illustrates the practical application of these formulae to the problem of

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SOV/137-59-1-1559

The Relationship Between the Geometrical and Weight Tolerances (cont.)

regulation of tolerances for shipbuilding steel and for sheet steel supplied by its theoretical weight.

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SOV/133/58-9-14/29

AUTHOR: Kuzema, I. D. (Cand.Tech.Sciences)

TITLE: Mastering of Rolling Plates According to the Theoretical Weight (Osvoyeniye prokatki tolstykh listov po teoreticheskomu vesu)

PERIODICAL: Stal', 1958, Nr 9, pp 817-820 (USSR)

ABSTRACT: In the usual rolling of plates, metal losses caused by a higher weight of the plates than the theoretical one are of the order of 1.5-2%. Therefore, mastering of rolling practice according to the theoretical weight will give a saving of metal. In the paper the introduction of this type of rolling practice in some works (not specified) is discussed It is pointed out that for the purpose it is necessary to establish internal (for the works) rolling tolerances (calculated by the method outlined in the paper), rational roll design (so that the difference between maximum and minimum thickness caused by roll wear and deflection was at a minimum) and a regular control of the plate thickness. There are 5 figures.

Card 1/2

SOV/133/58-9-14/29

AUTHOR: L'vovskiy, Sh. A. (Engineer)

TITLE: Determination of the Machine Time During Rolling Sheets with Doubling (Opredeleniye mashinnogo vremeni prokatki tonkikh listov s dublirovaniyem)

PERIODICAL: Stal', 1958, Nr 9, pp 821-823 (USSR)

ABSTRACT: An analytical method for calculating the mean coefficient of elongation and machine time during rolling of sheets with doubling is discussed. A formula for calculating machine time (Eq.19) is given. There is 1 table.

ASSOCIATION: Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhniy Tagil Metallurgical Combine)

Card 2/2

25(2) SOV/148-59-2-19/24

AUTHORS: Kirillov, B.S., Kapustina, M.I., and Kuzema I.D., Candidates of Technical Sciences; Danilov, V.D., and Savchenko, A.M., Engineers

TITLE: Investigation of the Crankshaft in Steam-Driven Rolling Mills (Issledovaniye kolenchatogo vala v sisteme parovogo privoda prokatnogo stana)

PERIODICAL: Izvestiya vysshikh uchebnykh zavadeniy, Chernaya metallurgiya, 1959, Nr 2, pp 143-151 (USSR)

ABSTRACT: In order to complete existing data the authors present information on the fatigue strength of crankshafts in steam driven rolling mills. Computations of the fatigue strength were preceded by dynamic analyses, including the character of stress and drive dynamics as well as by power analyses of the machine. The information includes recommendations on the computation of fatigue strength for multi-cranked shafts with a low revolution rate and subjected to no impact load.
There are 2 oscillograms, 1 photo, 6 sets of graphs and 1 table.

Card 1/2

SOV/148-59-2-19/24

Investigation of the Crankshaft in Steam-Driven Rolling Mills

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute), Kafedra mekhanicheskogo oborudovaniya metallurgicheskikh zavodov (Chair of Mechanical Equipment of Metallurgical Plants)

SUBMITTED: March 19, 1959

Card 2/2

KUZEMA, I.D., kand. tekhn. nauk

Effect of chemical composition and residual stress on the strength of hot-rolled sheet steel. Izv. vys. ucheb. zav.; chern. met. 2 no.3:85-92 Mr '59. (MIRA 12:7)

1.Zhdanovskiy metallurgicheskiy zavod im. Il'icha. Rekomendovana kafedroy obrabotki metallov davleniyem Zhdanovskogo metallurgicheskogo instituta.

(Sheet steel--Testing)

18.6100,25.2000

[illegible]
[illegible]

AUTHORS: Kapustina, M. I., Kuzema, I. D., Kirillov, B. S. (Candidates of Technical Sciences), Danilov, L. D., Savchenko, A. M. (Engineers)

TITLE: Development of Rational Rates of Rolling Ingots on a Roughing Mill

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, 1959, Nr 9, pp 95-100 (USSR)

ABSTRACT: A study of the work of the roughing mill at the shape rolling shops of the Plant imeni Il'yicha (Sortoprokatnyy tsekh zavoda imeni Il'yicha) for the purpose of eliminating the breakdowns of the main steam engine crankshaft and for establishing the optimum method of rolling the ingots on the existing roughing mill. B. N. Poydyshev, V. N. Demochko, L. N. Kurkin, Ye. N. Grishina, V. T. Demchenko, Ts. M. Rakhlin, A. V. Chechnev, P. P. Tokarev, N. M. Simonov, and V. M. Buynevich participated in the work. The investigated roughing mill consists of one two-high reversing 830-stand designated for

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Development of Rational Rates of Rolling Ingots on a Rolling Mill

SOV/[illegible]-59-9-9/28

rolling plate. The rolls are made from NKhSM steel (chromium-nickel steel: 0.4% C; [illegible]% Mn; [illegible]% Si; 0.040% P; 0.040% S; 0.40% Cr; 2.[illegible]% Ni). The power plant consists of one simple, single expansion, 4,100 HP, 3 cylinder, compound, horizontal, reversing steam engine, working at [illegible] atmospheres pressure and a gear transmission. During 1953-1957 there were six crankshaft breakdowns. The intervals between the breakdowns were from 2 to 19 months. The authors describe the methods of investigation and the results of same, with reference to the previous work of T. M. Golubev, L. N. Sorokin, and others, who investigated the power characteristics of the blooming mill at the Kuznetsk Metallurgical Combine (Kuznetskiy metallurgicheskiy kombinat) (Golubev, T. M., Sorokin, L. N., Zaykov, M. A., Kaftanov, M. P., et al., Stal', No 2, 1957). In the present work the strength calculations of the rolls and the crankshaft of the steam engine showed the reasons for their breakdowns. The calculation of the roll showed (see Fig. 4) that the weakest place of the rolls is in the second roll pass,

Card 2/

Development of Rational Rates of Rolling Ingots on a Roughing Mill

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SOV/148-59-4-9/19

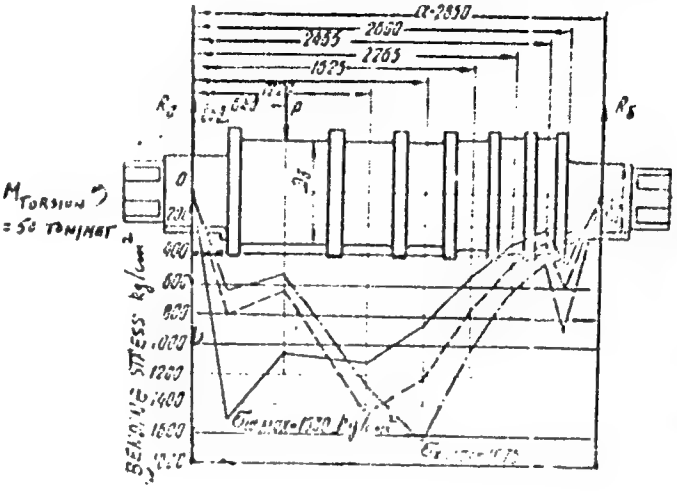

Fig. 4. The diagram of bending stresses in the roll's barrel (after remachining). —— 1st Pass, P_I = 670 ton; - - - 2nd Pass, P_{II} = 435 ton; — · — 3rd Pass, P_{III} = 525 ton.

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where the highest stresses during rolling of metal in the first and the second roll passes take place (up to σ = 1,480 kg/cm^2). The breakdowns of the lower roll are explained by the fatigue rupture of the lower roll which transmits the whole torsion moment of the second roll pass. The nagging of the second roll pass surface and the swapping of the rolls position (after the second remachining) proved to be the effective means of preventing the breakdowns of the lower roll by the second roll pass. The crankshaft calculations and the metallographic investigation showed that the cause of its breakdowns is the insufficient fatigue strength of the metal of the first crank arm. It is recommended that the first crank arm be manufactured from the alloy steel with tensile strength of about 90 kg/mm^2, which suggests the use of chromium-nickel-molybdenum steel 38KhN3MA (0.29% C; 0.50% Mn; 0.17% Si; 0.035% P; 0.040% S; 0.80% Cr; 2.5% Ni; and 0.20 to 0.30% Mo. There are 4 figures; 2 tables; and 5 Soviet references.

Card 4/5

Development of Rational Rates of Reduction [illegible]
Ingots on a Roughing Mill SOV/[illegible]

ASSOCIATION: Zhdanov Metallurgical Institute (Zhdanovskiy metallurgicheskiy institut)

SUBMITTED: June 11, 1959

Card 5/5

KAPUSTINA, M.I., kand.tekhn.nauk; KUZEMA, I.D., kand.tekhn.nauk, KIRILLOV, B.S., kand.tekhn.nauk; DANILOV, V.D., inzh., SAVCHENKO, A.M., inzh.

Developing efficient conditions of ingot rolling on cogging mills. Zool.zhur. 38 no.1:95-100 Ja '59. (MIRA 13:4)

1. Zhdanovskiy metallurgicheskiy institut.
(Rolling (Metalwork)

S/137/62/000/002/060/144
A006/A101

AUTHORS: Kapustina, M. I., Kuzema, I. D., Savchenko, A. M., Shiryayev, V. I., Goltvenko, A. I., Grishina, Ye. N.

TITLE: A rapid method of calculating the efficiency of three-high sheet rolling mills

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 18, abstract 2D8, ("Sb.nauchn. tr. Zhdanovsk. metallurg. in-t", 1960, no. [illegible], 133 - 138)

TEXT: Calculation data were checked by the oscillographic timing of a mill operation for all the brigades when rolling the main conventional sheet types of the mill assortments. A method was developed for calculating the efficiency of three-high mills on the basis of an analysis of reduction conditions, and force and power indices of rolling. The theoretical calculation of the efficiency of sheet rolling mills is given. The problem is discussed how to check the mill amount of work.

N. Yudin

[Abstracter's note: Complete translation]

Card 1/1

KUZEMA, I.D., kand.tekhn.nauk; PROKHOROV, A.V.

Mechanical and thermomechanical hardening of low-alloy and low-carbon steel. Stal' 20 no.8:745-750 Ag '60. (MIRA 13:7)

1. Zavod imeni Il'icha.
(Steel alloys—Cold working)

S/133/62/000/004/002/008
A054/A127

AUTHORS: Kuzema, I.D.; Yefimov, V.A.; Chernyshev, I.S.; Grebenyuk, V.P.; Oleshkevich, T.I.;

TITLE: Selecting the parameters of large-sized slabs

PERIODICAL: Stal', no. 4, 1962, 312 - 313

TEXT: The geometry of slabs is characterized by the width-to-thickness ratio (k) and the length-to-width ratio (k_1). A k-ratio above 2 causes cracks in the slabs and renders their finishing more difficult. When forming slabs with a k = 1,72ratio these drawbacks are eliminated,but the slabs will be far too thick, while, moreover other difficulties arise: more passes are required in rolling, more metal is lost in cutting off the edges,etc. Tests to cast large--sized slabs with a k-ratio above 2 without cracks were carried out by imparting a wavy shape to the side-wall surfaces, while the effect of the mold shape on the solidifying skin was also studied. In slabs with a high k (width-to-thickness) ratio deep longitudinal cracks are mainly caused by stresses developing in the skin prior to its separation from the mold-wall. The skin is also subjected to bending moments. The higher the k-value, the greater the stresses working in

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Selecting the parameters....

the skin. The bending moments, however, could be reduced considerably by giving the broad side of the slab a wavy shape. In that case the shrinkage of the skin takes place progressively, starting from the angles to the center. If several waves are formed on the broad side of a slab with a high k-value the gap formation is slowed down and the thin skin plays the part of a reinforcing continuous beam. Slabs, 5 - 7 tons in weight were tested, with width-to-thickness ratios of 2.3, 2.31 and 2.2. The best results were obtained with slabs on whose sides the curvature radius of the wave crest was not more than 5 mm. In another test series 11 - 15-ton slabs were tested with 5 - 9 waves on their broad sides and satisfactory crackfree surfaces were obtained in 70% of the output. By improving the geometry of the waves still further and increasing their depth to 24 mm the crack formation could be eliminated completely. When applying waves of the required length and depth and sufficiently acute angles, it is possible to cast large-sized ingots with a width-to-thickness ratio of more than 2.2. There are 5 figures.

ASSOCIATION: Zavod im. Il'icha (Plant im. Il'ich) and Institut gaza AN UkrSSR (Institute of Gas(es) of the Academy of Sciences UkrSSR)

Card 2/2

KAZANTSEV, I.G.; KUZNETSOV, A.F.; PRESNYAKOV, V.M.; MOLONOV, G.D.; KUZEMA, I.D.; CHERNYSHEV, I.S.; OLESHKEVICH, T.I.; KISSEL', N.V.; ANTOKHIN, N.T.; ROYANOV, V.V.

Manufacture of very thick plate from capped steel. Izv. vys. ucheb. zav.; chern. met. 6 no.6:49-50 '63. (MIRA 16:8)

1. Zhdanovskiy metallurgicheskiy institut i zavod im. Il'icha. (Steel ingots) (Rolling (Metalwork)--Quality control)

YEFIMOV, V.A., doktor tekhn. nauk; KUZEMA, I.D., kand. tekhn. nauk; ZHIGULA, A.V., inzh.; SAPKO, V.N., inzh.; KISSEL', N.N., inzh.; CHERNYSHEV, I.S., inzh.; ZARUBIN, N.G., inzh.; STRYAPIN, I.Ya., inzh.; OLESHKEVICH, T.I., inzh.; SONIN, G.V., inzh.; PUKALOV, V.P., inzh.

Rapid top pouring of rimmed steel from ladles with a capacity from 350 to 480 tons. Stal' 24 no.1:30-32 Ja '64. (MIRA 17:2)

FUCHS, [illegible]

[illegible] the shape of glob lugites and the [illegible] determining the [illegible] and [illegible] of [illegible] deformation. [illegible] 1956. (MIRA 18:8)

1. Zavod im. [illegible].

KUZ'MA, I.D., kand. tekhn. nauk; PROKHOROV, P.A., [illegible], T.M.; RUSETSKAYA, M.I.; BELOUSOVA, N.G.

Characteristics of the production of sheet for extra large boilers. Met. i gornorud. prom. no.5:38-40 S-O '64. (MIRA 18:7)

ACC NR: AP6006334 SOURCE CODE: UR/0413/66/000/002/0057/0057

AUTHOR: Paton, B. Ye.; Dudko, D. A.; Medovar, B. I.; Lutsyuk-Khudin, V. A.; Goyenko, V. Ya.; Kumysh, I. I.; Andrianov, G. G.; Karpov, V. F.; Dovzhenko, N. F.; Antonets, D. P.; Kuzema, I. D.

ORG: none

TITLE: Method of producing composite rolled stock. Class 21, No. 177985 [announced by Electric Welding Institute im. Ye. O. Paton (Institut Elektrosvarki)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 57

TOPIC TAGS: welding, metal rolling, sandwich rolling

ABSTRACT: An Author Certificate has been issued for a method of producing composite rolled metal by using a billet consisting of ingots or plates welded together by electroslag welding. To pave on stainless steel, lower the thickness of the clad layer, and simplify the welding procedure, it is suggested that the process be begun with a heterogeneous plate made from prewelded and prerolled smaller billets having been a carbon steel and clad layer, and then adding additional ingots or plates to produce sandwich rolled stock. [LD]

SUB CODE: 13/ SUBM DATE: 11Apr63 ORIG: none/ OTH REF: none/

Card 1/1 UDC: 621.791.793:621.771.2-419.5

L [illegible] EWT(m)/EWP(t)/T/ETI/EWP(b) IJP(c) JD/HW

ACC NR: AP6029871 SOURCE CODE: UR/0413/66/000/015/0022/0022

INVENTOR: Voronov, P. D.; Filatov, A. D.; Gun, S. B.; Selivanov, N. M.; Nosov, V. D.; Savel'yev, G. V.; Goncharov, F. I.; Plotnikov, P. I.; Roshkov, S. A.; Kustobayev, G. G.; Polushkin, V. P.; Arkhipov, V. M.; Uzlyenko, A. M.; Kolov, M. I.; Kozhevnikov, V. P.; Shapiro, B. S.; Kalugin, V. F.; Grudev, P. I.; Aksenov, B. N.; Khomyachkov, A. P.; Rudakov, Ye. A.; Kuzema, I. D.; Gomzhin, V. V.; Poylyshev, B. N.; Shternov, M. M.

58

B

ORG: none

TITLE: Method of making high-strength steel plates by pack rolling. Class 7, No. 184232

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 22

TOPIC TAGS: high strength steel, high strength steel plate, high strength steel sheet, steel plate rolling, steel sheet rolling

ABSTRACT: This Author Certificate introduces a method of pack rolling high-strength steel plates and sheets up to 10 mm thick and up to 3500 mm wide in a carbon steel envelope. The method includes cleaning, coating, making of the pack, heating, rolling and subsequent heat treatment. To ensure an accurate thickness of the plates

Card 1/2 UDC: 621.771.23

L 44005-66

ACC NR: AP6029871

or sheets regardless of their location in the pack, the thickness of the envelope must be at least 0.6 of the total initial thickness of the high-strength plates of the pack. [ND]

SUB CODE: 13/ SUBM DATE: 18Jun64/ ATD PRESS: 5070

Card 2/2 blg

KUZEMA, V.G.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 24-40, 25 Feb - 3 Apr 1954)

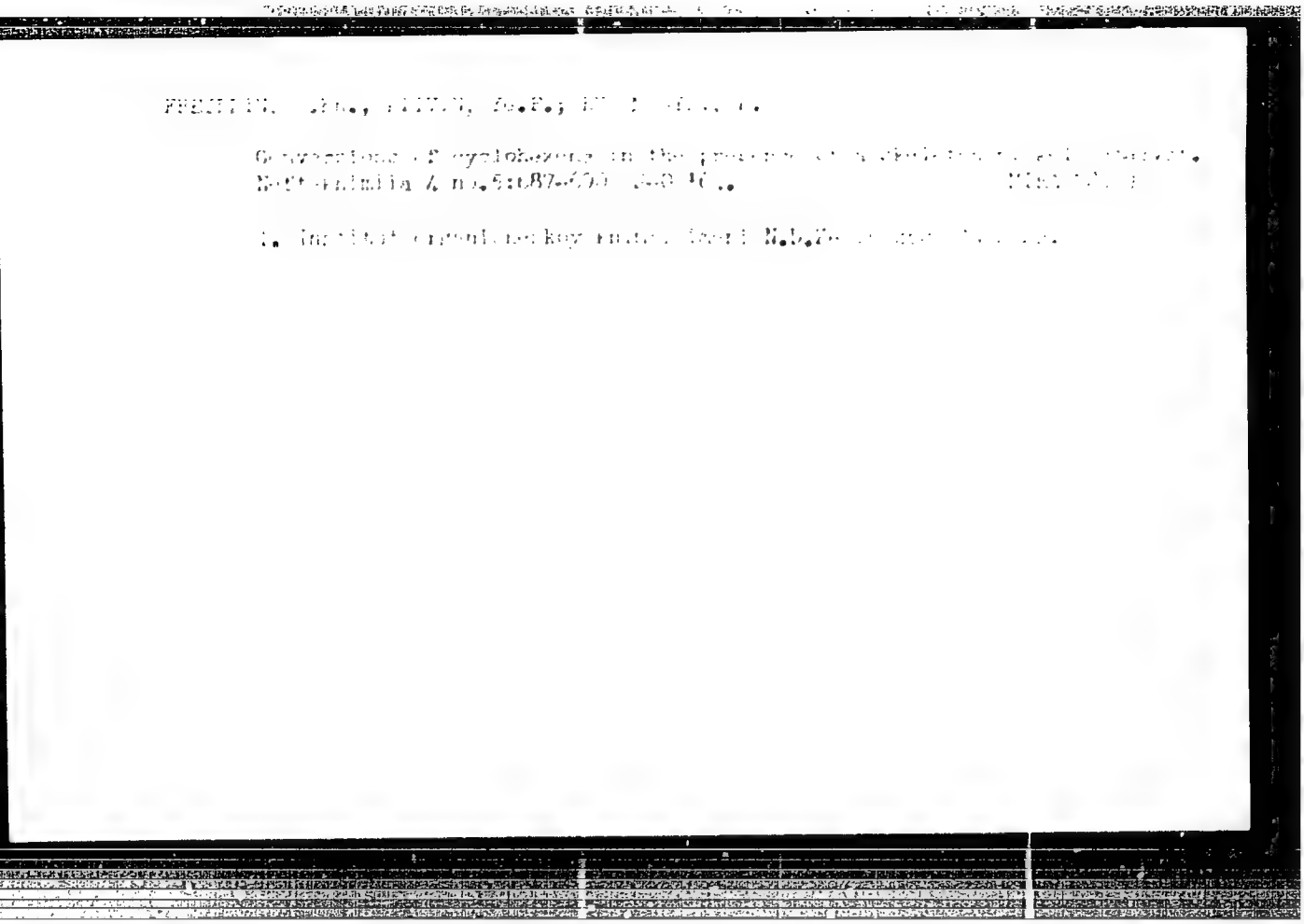
Name	Title of Work	Nominated by
Gareyev, E.Z. Arakelyan, U.G. Bychkova, N.F. Kolenko, A.Z. Lashin, M.I. Kuzema, V.G. Kryachkov, P.Ya.	"Michurinian Varieties of Fruit Trees in Kirgiziya"	Kirgiz Affiliate, Academy of Sciences USSR

SO: W-30604, 7 July 1954

[illegible] V. I., Kand. Tekh. Nauk

Apparatus for cyclic tensile testing. Zav. lab. 30 no.5:611-612 '64. (MIRA 17:5)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.



SOKOL'SKAYA, A.M.; KUZNBAYEV, K.K.

Hydrogenation of phenylacetylene. Vest. AN Kazakh. SSR 20 no.7: 45-50 Jl '64. (MIRA 17:11)

KUSEMBAYEV, K.K.; SOKOL'SKAYA, A.M.

Chromatographic separation of phenylacetylene and products of its hydrogenation. Zav. lab. 30 no.9:1077 '64. (MIRA 18:3)

1. Kazakhskiy gosudarstvennyy universitet imeni Kirova.

Agriculture -Economic Aspects

Results of enlarging of collective farms in the Kazakh S.S.R., Vop. ekon. No. 2, F '52.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

1. KUZEMIN, I.N., Eng.

2. USSR (600)

4. Electric Lines

7. Continuous operation system for assembling electric transmission line. Biul. stroi,tekh. 9 No. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KUZEMIN, I.M., inzh.

Kremenchug Hydroelectric Power Station on the Dnieper. Gidr. stroi. 30 no.11:6-15 N '60. (MIRA 13:10)
(Kremenchug Hydroelectric Power Station)

KUZEMIN, I.N., inzh.

Installation and operation of basic equipment at the Kremenchug Hydroelectric Power Station. Gidr. stroi. 31 no. 12:56-61 D '60. (MIRA 14:4)

(Kremenchug Hydroelectric Power Station—Equipment and supplies)

KUZEMIN, I.N., inzh.; STROGANOV, Ye.M., inzh.

Preparation for starting and temporary operation of the Kremenchug Hydroelectric Power Station. Energ.stroi. no.23:101-106 '6[illegible].
(MIRA 15:1)

1. Direktor Kremenchugskoy gidroelektrostantsii (for Kuzemin).
2. Glavnyy inzh. direktsii Kremenchugskoy gidroelektrostantsii (for Stroganov).

(Kremenchug Hydroelectric Power Station)

KUZEMIN, I.N.

Efficiency promotion at the Kremenchug Hydroelectric Power Station. Gidr. stroi. 33 no.11:44-47 N '62. (MIRA 16:1)

1. Direktor Kremenchugskoy gidroelektrostantsii.
(Kremenchug Hydroelectric Power Station--Technological innovations)

BALATS, D.S., GREBENNIK, I.I.; KUZEMKIN, V.I.

Machine for bending clamps. Mashinostroitel' no.7:34 Jl '59.
(MIRA 12:11)

(Bending machines)

KUZ'MKINA, Ye.N.

Composition and textural characteristics of beans in Mesozoic bauxites in Kustanay Province. Geol. rud. mestorozh. no.3:96-10? My-Je '60. (MIRA 13:7)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.
(Kustanay Province—Bauxite)

KUZEMKINA, Ye.N.

Concerning some secondary processes in Mesozoic bauxites in the northwestern Turgay Gates. Kora vyvetr. no.4:195-209 '62. (MIRA 15:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.
(Turgay Gates--Bauxite)

MIRA, O.P.[Mehra, O.P.]; DZHEKSON, M.L.[Jackson, M.L.]; KUZEMKINA, Ye.N.[translator]

Removal of iron oxides from soils and clays by means of the dithionite-citric acid system with the buffer solution of sodium bicarbonate. Kora vyvetr. no.5:389-397 '63. (MIRA 16:7)

(Mineralogical chemistry)

KUTLAKINA, Ye.N.

Supergenic millerite from the serpentinite weathering surface. Kora vyvetr. no.9:29-33 '65.

Nickel-bearing weathering surface on the ultrabasites of the Kola Massif (Northern Urals). Ibid.:56-78

(MIRA 19:1)

BOROVSKIY, P. V.

PHASE I BOOK EXPLOITATION SOV/6206 75

Konferentsiya po teorii plastin i obolochek. Kazan', 1960.

Trudy Konferentsii po teorii plastin i obolochek, 24-29 oktyabrya 1960. (Transactions of the Conference on the Theory of Plates and Shells Held in Kazan', 24 to 29 October 1960). Kazan', [Izd-vo Kazanskogo gosudarstvennogo universiteta] 1961. 426 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Kazanskiy filial. Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina.

Editorial Board: Kh. M. Mushtari, Editor; F. S. Isanbayeva, Secretary; N. A. Alumyae, V. V. Bolotin, A. S. Vol'mir, N. S. Ganiyev, A. L. Gol'denveyzer, N. A. Kil'chevskiy, M. S. Kornishin, A. I. Lur'ye, G. N. Savin, A. V. Sachenkov, I. V. Svirskiy, R. G. Surkin, and A. P. Filippov. Ed.: V. I. Aleksagin; Tech. Ed.: Yu. P. Semenov.

PURPOSE: The collection of articles is intended for scientists and engineers who are interested in the analysis of strength and stability of shells.

Card 1/14

Transactions of the Conference (Cont.) SOV/6206

COVERAGE: The book is a collection of articles delivered at the Conference on Plates and Shells held in Kazan' from 24 to 29 October 1960. The articles deal with the mathematical theory of plates and shells and its application to the solution, in both linear and nonlinear formulations, of problems of bending, static and dynamic stability, and vibration of regular and sandwich plates and shells of various shapes under various loadings in the elastic and plastic regions. Analysis is made of the behavior of plates and shells in fluids, and the effect of creep of the material is considered. A number of papers discuss problems associated with the development of effective mathematical methods for solving problems in the theory of shells. Some of the reports propose algorithms for the solution of problems with the aid of electronic computers. A total of one hundred reports and notes were presented and discussed during the conference. The reports are arranged alphabetically (Russian) by the author's name.

Card 2/14

Card 5/14

B.RM7

S/044/62/000/007/040/100
C111/C222

AUTHORS: Gavelya, S.P., Kuzemko, A.M.

TITLE: The application of regular integral equations to some problems of the theory of flat shells

PERIODOCAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 67, abstract 7B324. ("Zb. robit aspirantiv Mekhan.-matem. ta fiz. fak. L'vivs'k. un-t", 1961, no. 1, 3-10)

TEXT: The authors consider the system of differential equations for the equilibrium of flat elastic shells. The authors use known results for the Lamé system and for the biharmonic equation and construct the Green function for the principal parts of the differential operators of the system. With the aid of this Green function the problem is reduced to a regular system of Fredholm integral equations of second kind. It is pointed out that this system is unrestrictedly solvable, if the shell is sufficiently weakly curved. As an example the authors consider a problem with rigid-flexible fixing.
[Abstracter's note : Complet translation.]

Card 1/1

KUZENKO, T.,

Convenient accounting blank. Obshchestv. pit. no. 8:38-39 Ag '60.
(MIRA 14:4)

1. Starshiy bukhgalter Restorana, No. 3 "Yuzhnyy" Leninskogo tresta stolovykh Khar'kova.
(Kharkov--Restaurants, lunchrooms, etc.--Accounting)

KUZENKO, V.N.; LOKEMAN, A.A.

Characteristics of the fracture tectonics of the complex-metal belt in eastern Transbaikalia. Geol.sbor. [Lvov] no.9:114-118 '65. (MIRA 18:12)

GORODKOV, B.N., professor; KUZMICHEVA, O.I.; ORLOVA, N.I.; POYARKOVA, A.I.; SMLIVANOVA-GORODKOVA, Ye.K.; [illegible], Ye.G.; SHLYAKOVA, Ye.V.; GOLOVNIN, M.I., redaktor; KROL, D.M., tekhnicheskiy redaktor

[Flora of Murmansk Province] Flora Murmanskoi oblasti. Moskva, Izd-vo Akad. nauk SSSR, No.1. 1953 254 p., maps. No.2. 1954. 238 p., maps. (MLRA 8:7)

1. Polyarno-al'piyskiy botanicheskiy sad.
(Murmansk Province—Botany)

KUZENEVA, O.I.; CHERNOV, Ye.G.

Description of the family Cyperaceae, table for indentifying genera of the Cyperaceae family, and the genus Carex. Genera: Eriophorum, Trichophorum, Scirpus, Bolboschoenus, Schoenoplectus, Blysmus, Eleocharis, Schoenus, Rhyncospora, Kobresia. Flora Murm.obl. no.2:11-142 '54. (MLRA 7:10)

(Murmansk Province--Sedges) (Sedges--Murmansk Province)

AVRORIN, N.A.; KUZENEVA, O.I.; ORLOVA, N.I.; PIS'YAUKOVA, V.V.; POYARKOVA, A.I.; ZEMENOVA-TYAN-SHANSKAYA, N.Z.; CHERNOV, Ye.O.; SHLYAKOV, R.N.; TVERITINOVA, K.S., tekhnicheskiy redaktor

[Flora of Murmansk Province] Flora Murmanskoi oblasti. Moskva, Izd-vo Akademii nauk SSSR. No.3. 1956. 449 p. (MLRA 9:11)
(Murmansk Province--Botany)

AVRORIN, N.A.; KUZEMEVA, O.I.; ORLOVA, N.I.; POYARKOVA, A.I.; SEMENOVA-TYAN-SHANSKAYA, N.Z.; CHERNOV, Ye.G.; SHLYAKOV, R.N.; TUZEPCHUK, S.V. [deceased]; ARONS, R.A., tekhn.red.

[Flora of Murmansk Province] Flora Murmanskoi oblasti. Moskva. No.4. 1959. 393 p. (MIRA 12:8)

1. Akademiya nauk SSSR. Kol'skiy filial, Kirovsk.
(Murmansk Province--Dicotyledons)

KUZENEVA, O.I.

Flora of Murmansk Province. Bot. zhur. 48 no.8:1215-1216 Ag '63.
(MIRA 16:10)

1. Polyarno-al'piyskiy botanicheskiy sad Kol'skogo filiala imeni S.M. Kirova AN SSSR, Kirovsk Murmanskoy oblasti.
(Murmansk Province—Botany)

KUZENKO, A.V.

CARD 1 / 2 PA - 1939

SUBJECT USSR / PHYSICS

AUTHOR GOVORKOV, B.B., GOL'DANSKIJ, V.I., KARPUCHIN, O.A., KUZENKO, A.V. PAVLOVSKAJA, V.V.

TITLE The Elastic Scattering of γ -Quanta with an Energy of up to 120 MeV by Protons.

PERIODICAL Dokl. Akad. Nauk 111, fasc. 5, 988-991 (1956)

Issued: 1 / 1957

Experiments were carried out by means of the 265 MeV-synchrotron of the Physical Institute "P.N. LEBEDEV" of the Academy of Science in the USSR. For the purpose of reducing the photon load of individual counters work was carried out in such a manner that the duration of the impulses of the synchrotron amounted to 1000 μ sec (instead of the usual 30 μ sec). The spectrum of the electrons impinging upon the target of the synchrotron was nearly triangular with the base of 75 to 119 MeV and with the maximum at 97 MeV. The elastic γ p-scattering at these energies was investigated by registration of the scattered γ -quanta solely with the help of telescopes which consist of scintillation counters. An attached drawing illustrates this experimental order. Observation was carried out with two telescopes which were fitted simultaneously under the angles 90 and 90°, 45 and 90°, 45 and 135° (in the laboratory system). Each telescope consisted of four liquid-scintillation-counters with a solution of terphenyl in toluene. The recording threshold for the γ-quanta in the case of both telescopes amounted to ~ 40 MeV. The light pulses emitted from the scintillators were recorded by means of photoelectronic multipliers

Dokl.Akad.Nauk 111,fasc.5,988-991 (1956) CARD 2 / 2 PA - 1939

FEU - 19 - II. Liquid hydrogen was used in a target vessel of penopolystirol. The determination of the effectively acting volume of the target is described.

Experimental results are shown in form of a graph. The cross section for the angle 90° amounts to $d\sigma/d\Omega = (1,35 \pm 0,13).10^{-32}$ cm^2/sterad and agrees well with the results obtained by C.OXLEY and V.TELEGDI, Phys.Rev.100,435 (1955). However, in contrast to this work, the authors obtained a predominating scattering of photons into the rear hemisphere (for 45° - $d\sigma/d$ = $= (1,40 \pm 0,17).10^{-32}$ cm^2/sterad; for 135°- $(2,25 \pm 0,45).10^{-32}$ cm^2/sterad). This result has the following significance: Already at energies of γ quanta of up to 120 MeV the analysis of the COMPTON effect on protons, which is based only on the value of the anomalous statistical magnetic moment and results in a certain predominance of scattering in to the front hemisphere, is found to be insufficient. Apparently the interference of the scattering of γ -quanta on the proton as a punctiform source and on the nucleon-isobar becomes noticeable already at such energies, viz. because of the existence of an asymmetric nulceon cloud a dynamic magnetic moment of the nucleons occurs.

INSTITUTION: Physical Institute "P.N.LEBEDEV" of the Academy of Science in the USSR

KUZENKO, G.M.

We need a precise plan for training locomotive crews. Elek. i tepl. tiaga 3 no.4:26 Ap '59. (MIRA 12:7)

1.Zaveduyushchiy uchebnoy chast'yu Krasnolimanskoy tekhnicheskoy shkoly mashinistov.
(Locomotive engineers--Education)

VARYAKHOVSKIY, A.S.; DYATLOV, V.V.; [illegible]; [illegible]; G.I.; SHIRKOV, A.G.; KOMOV, A.T., red.

[Elements of contactless remote control systems] Elementy beskontaktnykh sistem telemekhaniki. Moskva, Tsentr. nauchno-tekhn. informatsii Gos. proizv. ob"yedineniia k-ta po gazovoi promyshl. 1963. 16 p. (MIRA 17:11)

A

L 9737-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACC NR: AP5027169 SOURCE CODE: UR/0076/65/039/010/2359/2364

AUTHOR: Bogdanov, G.A.; Yurchenko, G.K.; Kuzenko, L.A.

ORG: Moscow Textile Institute (Moskovskiy tekstil'nyy institut)

TITLE: Study of sodium peroxooxyvanadates

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 10, 1965, 2359-2374

TOPIC TAGS: vanadate, peroxide, vanadium compound, sodium compound

ABSTRACT: The methods of preparation of sodium peroxooxyvanadates, which are intermediates in the catalysis of hydrogen peroxide by sodium vanadate, were elaborated, and the compounds were isolated. Their composition was determined to be $NaVO_4$, $NaVO_4 \cdot H_2O_2$, and $NaVO_4 \cdot 3H_2O_2$; the latter two have not been described before. $NaVO_4$ is a true peroxide with a fairly stable inner coordination sphere. The decomposition of sodium monoperoxovanadate in solution is homogeneous and occurs via an inner-sphere recombination without being accompanied by radical-chain processes. The dependence of the decomposition rate on the concentration obeys an equation that is close to first-order. The molar conductance of aqueous $NaVO_4$ solutions changes anomalously with dilution; Ostwald's and

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L 9737-66
ACC NR: AP5027169

Werner's laws do not apply in this case. At room temperature, dry $NaVO_4$ is stable and decomposes with a vigorous evolution of heat at temperatures above 80C. The process of thermal decomposition of $NaVO_4$ essentially obeys the topochemical laws and occurs at the interface. The equilibrium constants, free energy changes, and entropy changes of the decomposition of $NaVO_4$ in water were calculated for several temperatures. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 07 / SUBM DATE: 04Apr64 / ORIG REF:005 / OTH REF: 002

Card 2/2

BOGDANOV, G.A.; YURCHENKO, G.K.; KUZ[illegible], L.A. (Moscow)

Theory of catalysis in solution. Part 1. Zhur. fiz. khim. 38 no.5:1229-1234 My '64. (MIRA 18:12)

[redacted]

[redacted] (NIH: 24-32)

[redacted] Moskovskiy tekstil'nyy institut. Submitted April 4, 1964.

KUZENKO, M.Ya., inzh. (Khar'kov)

Planning the work of the train dispatching staff in a section.
Zhel.dor.transp. 47 no.4:32-34 Ap '65.
(MIRA 18:6)

KUZENKO, V.M.; GONCALO, V.A.

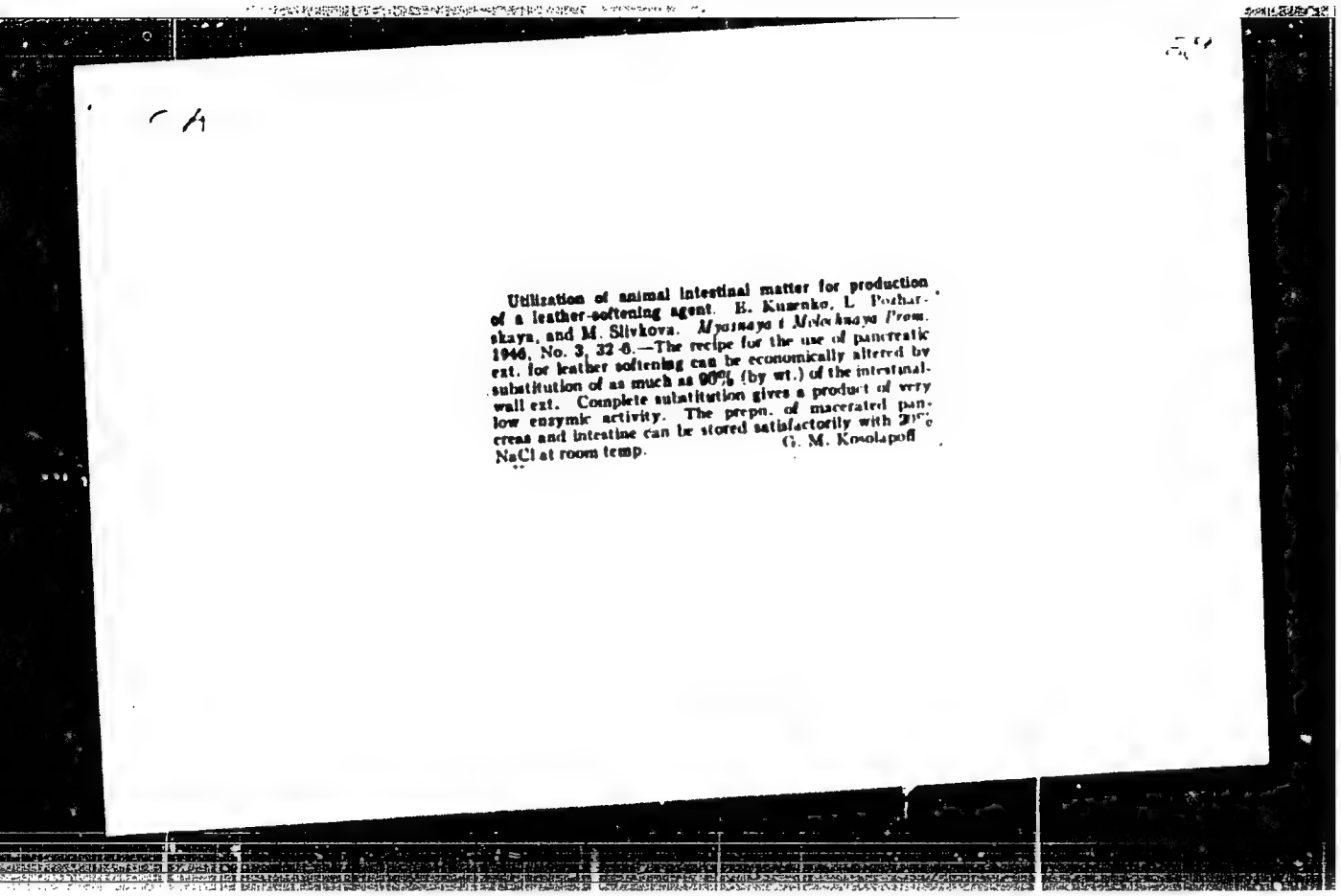
Distributing expenditures in the exploitation of gas condensate fields. Neft. i gaz. prom. no.1:30-32 Ja-Mr '64.

(MIRA 18:2)

KUZENKO, Ye.

Factors affecting the yield of endocrine enzymes and special raw materials. Mias. ind. SSSR 34 no.4:11-15 '63.
(MIRA 16:10)

1. Moskovskiy ordena Lenina myasnoy kombinat.



Utilization of animal intestinal matter for production of a leather-softening agent. B. Kuzenko, L. Pozharskaya, and M. Slivkova. *Myasnaya i Molochnaya Prom.* 1946, No. 3, 32-6.—The recipe for the use of pancreatic ext. for leather softening can be economically altered by substitution of as much as 90% (by wt.) of the intestinal-wall ext. Complete substitution gives a product of very low enzymic activity. The prepn. of macerated pancreas and intestine can be stored satisfactorily with 20% NaCl at room temp.

G. M. Kosolapoff

BELEN'KIY, N., akademik; KUZENKO, Ye.; POZHARSKAYA, L., kandidat biologicheskikh nauk; RYNDINA, V.

Separating blood plasma in medium and small meat combines. Mias. ind.SSSR. 27 no.2:10-11 '56. (MLRA 9:8)
(BLOOD PLASMA) (SEPARATORS (MACHINERY))

BELEN'KIY, N.G., POZHARISKAYA, L.S., KUZENKO, Ye.V., VOLKOVA, A.G.

Improvement in obtaining sterile blood serum for use in medicinals. Med.prom. 12 no.8:18-22 Ag '58 (MIRA 11:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti.
(SERUM)

BELEN'KIY, N.G., akademik; POZHARISKAYA, L.S., kand.biologicheskikh nauk; VOLKOVA, A.G., mladshiy nauchnyy sotrudnik; KUZENKO, Ye.V., inzh.

Properties of the blood plasma and serum of cattle. Trudy VNIIMP no.9:104-108 '59. (MIRA 13:8)
(Cattle) (Blood analysis and chemistry)

KUZENKO, Ye.; SINTSOVA, M.

Autolysis method for obtaining gastric juices on a production line. Mias.ind. SSSR 33 no.3:50-51 '62. (MIRA 15:7)

1. Moskovskiy myasokombinat.
(Meat industry—By-products) (Gastric juice)

OL'SHANOVA, K., prof.; POTAPOVA, M., kand.khim.nauk; KORNIYENKO, A., kand. tekhn.nauk; KUZ'ENKO, Ye.; SHIBANOVA, P.

Ion exchange resins in the production of protein hydrolyzates. Mias.ind.SSSR 35 no.1:16-20 '64. (MIRA 17:4)

1. Moskovskiy technologicheskiy institut myasnoy i molochnoy promyshlennosti (for Korniyenko). 2. Moskovskiy ordena Lenina myasokombinat (for Shibanova).

L 29597-66 EWT(1)/FCC GW

ACC NR: AT6013746 SOURCE CODE: UR/2789/65/000/067/0017/0023

AUTHOR: Kuzenkov, A. F.

ORG: none

TITLE: A method for measuring radioactivity in the free atmosphere

SOURCE: Tsentral'naya aerologicheskaya observatoriya, no. 67, 1965. Metody i rezul'taty aerologicheskikh nablyudeniy (Methods and results of aerological observations), 17-23

TOPIC TAGS: atmospheric radioactivity, radiosonde, radiation instrument

ABSTRACT: A radiosonde method is proposed for measuring atmospheric radioactivity. The equipment used for this measurement is based on the RKZ-1 radio unit. The radiation indicator consists of three STS-6 self-quenching counters connected in parallel. The outer surface of the radiation receiver is painted black to amplify the absorbed short-wave solar radiation. The power supply is a GB-400 battery. A schematic diagram of the device is given. The tape output of the device is the graphical representation of a function of the form

$$\bar{n}(t) = \frac{1}{\tau}\int_{t}^{t+\tau} n(t)\,dt,$$

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ACC NR: AT6013746

where $n(t)$ is the number of discharges recorded by the radiation receiver; $\bar{n}(t)$ is the average count rate in time τ. The operation of the equipment is briefly described and statistical and instrument errors are analyzed. The sensitivity of the method is determined for measurements in regions of high radioactivity. If the sensitivity of the device is defined as its capacity to measure the number of decays of radioactivity products $n=n_b/10$ where n_b is the intensity of the background count, then the threshold of sensitivity at an altitude of 20 km where n_b is a maximum (220 pulses per second) is $7.3 \cdot 10^2$ decays/m^3 or $1.9 \cdot 10^{-8}$ Curie/m^3. The sensitivity of the instrument increases with altitude since the free path of the particles increases more quickly than the intensity of the background count. The sensitivity close to the surface of the earth is of the order of $4 \cdot 10^{-8}$ Curie/m^3. These values of sensitivity are somewhat underestimated since the accumulation of γ-quanta was not considered and only the photon component of radioactivity was accounted for. The device was tested at an altitude of 20 km under natural conditions. It is shown that the instrument gives repeatable results. Orig. art. has: 3 figures, 2 formulas.

SUB CODE: 08/ ORIG REF: 004/ OTH REF: 001

Card 2/2

KUZENKOV, A.F.; POTEMKIN, I.G.

Some results of aerological observations by means of radar aboard the ship "IU.M.Shokal'skii. Meteor. i gidrol. no.7: 46-49 Jl '62. (MIRA 15:6)

(Radar meteorology)

KUZENKOV, A.F.

Method of measuring radioactive radiation in the free atmosphere. Trudy TSAO no.67:17-23 '65.

(MIRA 19:1)

KUZENKOV, A.F.

Comparative sensitivity of sounding radiometers. Trudy GGO no.158: 123-127 '64. (MIRA 17:9)

KUZENKOV, F.F.

Bulldozer for removing the sphagnum moss layer. Torf.prom. 32 no.8:28 '55. (MLRA 9:4)

1.Popovskoye torfopredpriyatiye.
(Peat machinery)